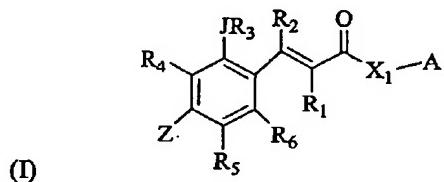


**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of the claims in the application:

1. (Currently Amended) A compound of the formula:



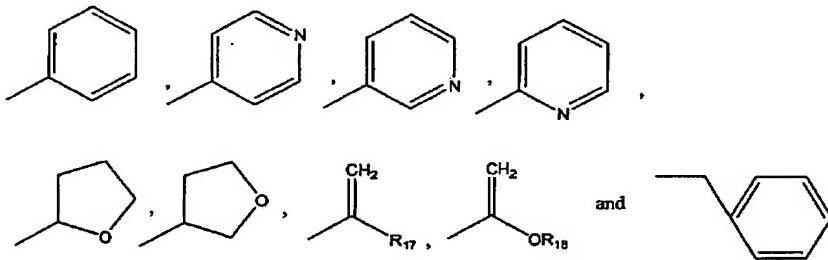
wherein:

R<sub>1</sub> and R<sub>2</sub> are individually selected from the group consisting of H, CH<sub>3</sub>, C<sub>2</sub>-C<sub>10</sub> alkyls, C<sub>2</sub>-C<sub>10</sub> alkenyls or C<sub>2</sub>-C<sub>10</sub> alkynyls, each of which can be substituted or unsubstituted; straight or branched, C<sub>2</sub>-C<sub>10</sub> heteroalkyls, C<sub>2</sub>-C<sub>10</sub> heteroalkenyls or C<sub>2</sub>-C<sub>10</sub> heteroalkynyls and -(CR<sub>15</sub>R<sub>16</sub>)<sub>p</sub>-D;

wherein: R<sub>15</sub> and R<sub>16</sub> are individually selected from the group consisting of H, CH<sub>3</sub>, C<sub>2</sub>-C<sub>10</sub> alkyls, C<sub>2</sub>-C<sub>10</sub> alkenyls or C<sub>2</sub>-C<sub>10</sub> alkynyls, each of which can be substituted or unsubstituted; straight or branched; and C<sub>2</sub>-C<sub>10</sub> heteroalkyls, C<sub>2</sub>-C<sub>10</sub> heteroalkenyls or C<sub>2</sub>-C<sub>10</sub> heteroalkynyls;

p is a positive integer from 1 to about 12;

D is selected from among -SH, -OH, X<sub>2</sub>, -CN, -OR<sub>19</sub>, NHR<sub>20</sub>,



wherein:

R<sub>17</sub> is H, CH<sub>3</sub> or X<sub>3</sub>;

R<sub>18</sub> is H, a C<sub>1-4</sub> alkyl or benzyl;

R<sub>19</sub> is H, a C<sub>1-4</sub> alkyl, X<sub>2</sub> or benzyl;

R<sub>20</sub> is H, a C<sub>1-10</sub> alkyl or -C(O)R<sub>21</sub>,

wherein R<sub>21</sub> is H, a C<sub>1-4</sub> alkyl or alkoxy, t-butoxy or benzyloxy;

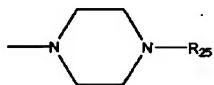
X<sub>2</sub> and X<sub>3</sub> are independently selected halogens;

R<sub>3</sub> is H, CH<sub>3</sub>, or -C(=O)(CR<sub>15</sub>R<sub>16</sub>)<sub>w</sub>-D,

where w is 0 or an integer from 1 to about 12, and D is H or as described for R<sub>1</sub> and R<sub>2</sub>.

J is O, NH or S;

R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of H, CH<sub>3</sub>, C<sub>2</sub>-C<sub>10</sub> alkyls, C<sub>2</sub>-C<sub>10</sub> alkenyls or C<sub>2</sub>-C<sub>10</sub> alkynyls, each of which can be substituted or unsubstituted; straight or branched; C<sub>2</sub>-C<sub>10</sub> heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;



Z is NR<sub>7</sub>R<sub>8</sub> or

wherein R<sub>7</sub> is selected from among H, CH<sub>3</sub>, C<sub>2</sub>-C<sub>10</sub> alkyls, alkenyls or alkynyls which can be substituted or unsubstituted; straight or branched; C<sub>2</sub>-C<sub>10</sub> heteroalkyls, heteroalkenyls or heteroalkynyls, or -(CR<sub>23</sub>R<sub>24</sub>)<sub>q</sub>-aryl, or R<sub>8</sub>,

wherein R<sub>23</sub> and R<sub>24</sub> are independently selected from the group consisting of H and C<sub>1</sub>-C<sub>10</sub> alkyls;

q is an integer from 1 to about 6;

R<sub>8</sub> is selected from the group consisting of (CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-NR<sub>22</sub>-R<sub>11</sub>, (CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-CH<sub>2</sub>-NHC(O)R<sub>26</sub> and (CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-CH<sub>2</sub>-E;

wherein R<sub>9</sub> and R<sub>10</sub> are independently selected from the group consisting of H, CH<sub>3</sub>, C<sub>2</sub>-C<sub>10</sub> alkyls, C<sub>2</sub>-C<sub>10</sub> alkenyls or C<sub>2</sub>-C<sub>10</sub> alkynyls, each of which can be substituted or unsubstituted; straight or branched; C<sub>2</sub>-C<sub>10</sub> heteroalkyls, C<sub>2</sub>-C<sub>10</sub> heteroalkenyls or C<sub>2</sub>-C<sub>10</sub> heteroalkynyls and halogens;

R<sub>26</sub> is H, CH<sub>3</sub>, O-t-butyl, O-benzyl;

E is OH, SH or O-C(O)R<sub>27</sub>,

wherein R<sub>27</sub> is a C<sub>1</sub>-C<sub>6</sub> alkyl, benzyl or phenyl;

R<sub>22</sub> is H or CH<sub>3</sub>;

n is a positive integer from 1 to about 10;

R<sub>11</sub> is H or -L-B,

wherein L is a linker selected from the group consisting of succinimides, maleimides, imidoesters, 2-iminothiolane, hydrazides, maleic anhydride, azides, citraconic anhydride, glutaraldehyde and N-hydroxysuccinimidyl; for linking NR<sub>22</sub> to B; and

B is a first active moiety, reactive group moiety or a polymer selected from the group consisting of antibodies, antibody fragments, single chain antibodies, proteins, nucleic acids,

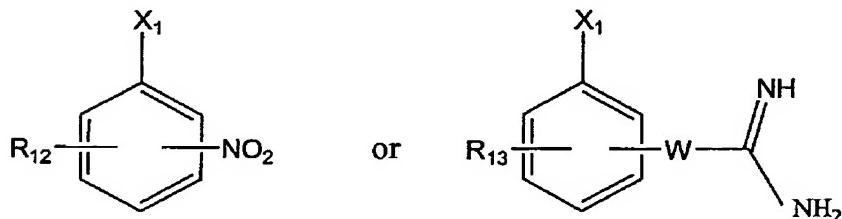
lectins, lipids, carbohydrates, polyalkylene oxides, glycosaminoglycans, poly-aspartic acid, poly-L-lysine, polyvinylpyrrolidone, collagen, peptides, hormones, ligands for receptors, growth factors, interferons, cytokines, metabolites that bind to a cell surface receptor, sugar peptides, polyethylene glycol polymers, polyethylene glycol polymer derivatives, polyglutamic acids, inhibitors of cell surface enzymes, and dextrans;

R<sub>25</sub> is H, -C(O)-R<sub>28</sub> or -C(O)-O-R<sub>29</sub>,

wherein R<sub>28</sub> is a C<sub>1</sub>-C<sub>6</sub> alkyl or benzyl; and R<sub>29</sub> is CH<sub>3</sub>, t-butyl or benzyl;

X<sub>1</sub> is O, NH, or S; and

A is H, a second active moiety or A<sub>1</sub> wherein X<sub>1</sub>A<sub>1</sub> is



wherein R<sub>12</sub> and R<sub>13</sub> are independently H or electron donating or electron withdrawing groups and W is CH or N.

2. (Original) The compound of claim 1, wherein Z is NR<sub>7</sub>R<sub>8</sub>.
3. (Original) The compound of claim 2, wherein R<sub>8</sub> is -CH<sub>2</sub>-CH<sub>2</sub>-NH<sub>2</sub>.
4. (Original) The compound of claim 2, wherein R<sub>8</sub> is (CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-NR<sub>22</sub>-R<sub>11</sub>.
5. (Currently amended) The compound of claim 1, wherein B L is a maleimidyl or an N-hydroxysuccinimidyl group.
6. (Previously presented) The compound of claim 4, wherein R<sub>11</sub> is a polyalkylene oxide residue.
7. (Original) The compound of claim 6, wherein said polyalkylene oxide residue is a polyethylene glycol.
8. (Original) The compound of claim 7, wherein said polyethylene glycol has a number average molecular weight of from about 2,000 to about 200,000 daltons.

9. (Previously presented) The compound of claim 4, wherein R<sub>11</sub> is a member of the group consisting of collagen, glycosaminoglycan, poly(-aspartic acid), poly(-L-lysine), poly(-lactic acid), poly-N-vinylpyrrolidone and copolymers of poly(-lactic acid) and poly(-glycolic acid).

10. (Original) The compound of claim 1, wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of H, CH<sub>3</sub> and CH<sub>3</sub>CH<sub>2</sub>.

11. (Original) The compound of claim 4, wherein R<sub>7</sub> is CH<sub>3</sub>CH<sub>2</sub>; R<sub>8</sub> is -(CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-NR<sub>22</sub>-R<sub>11</sub>; and R<sub>9</sub> and R<sub>10</sub> are H; n is 2; and X<sub>1</sub> is O, S or NH.

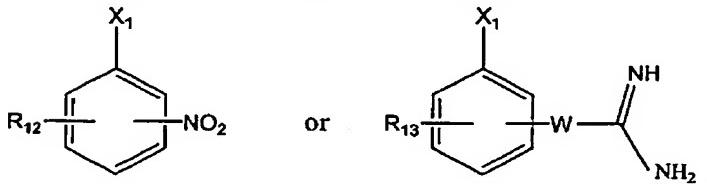
12. (Original) The compound of claim 4, wherein R<sub>7</sub> is CH<sub>3</sub>CH<sub>2</sub>; R<sub>8</sub> is -(CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-NR<sub>22</sub>-R<sub>11</sub> and R<sub>9</sub> and R<sub>10</sub> are H.

13. (Withdrawn) The compound of claim 1, wherein said second active moiety comprises a member of the group consisting of X<sub>1</sub>A<sub>1</sub> or X<sub>1</sub>A<sub>2</sub> wherein

X<sub>1</sub>A<sub>1</sub> is a substrate or substrate analog selected from the group consisting of amino acids, amino acid derivatives, peptides, peptide derivatives and substrates or substrate analogs for serine proteases, cysteine proteases, esterases, lipases, or other enzymes containing an active site serine or cysteine; and

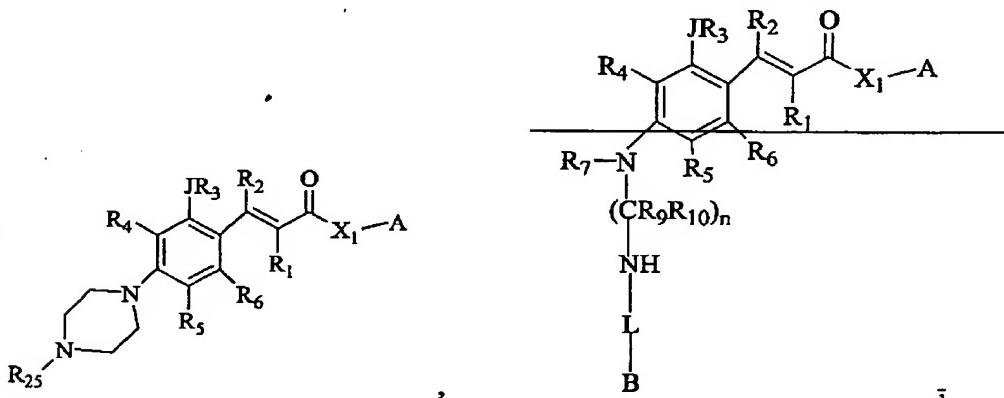
X<sub>1</sub>A<sub>2</sub> is an enzyme.

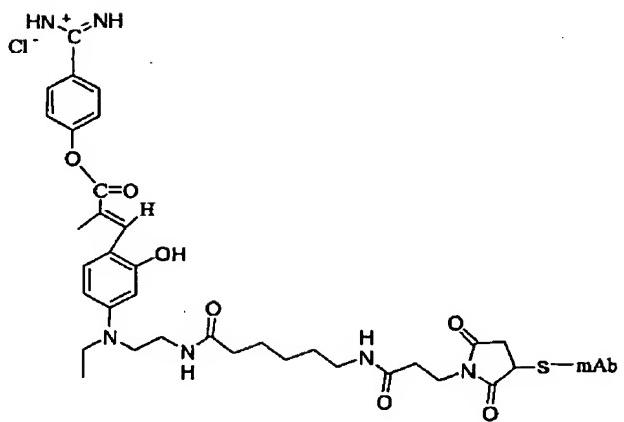
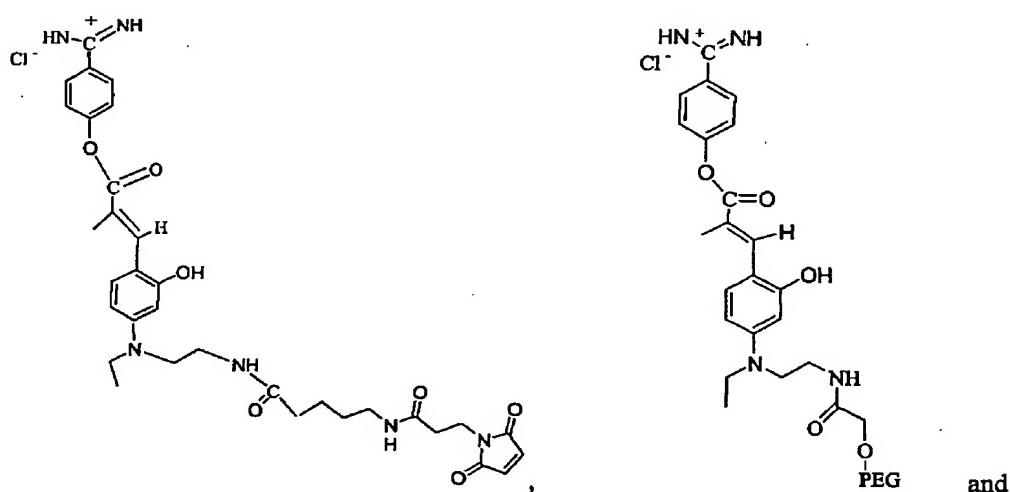
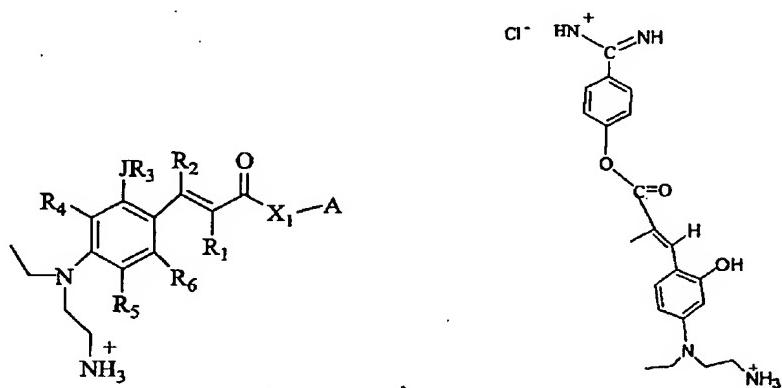
14. (Previously presented) The compound of claim 1, wherein X<sub>1</sub>A is



15. (Withdrawn) The compound of claim 13, wherein A<sub>2</sub> is an enzyme selected from the group consisting of serine proteases, cysteine proteases, esterases, lipases and enzymes containing an active-site serine or cysteine.

16. (Original) The compound of claim 14, wherein J is O, R<sub>2</sub> is H, R<sub>7</sub> is CH<sub>3</sub>CH<sub>2</sub>; R<sub>8</sub> is -(CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-NR<sub>22</sub>-R<sub>11</sub>, R<sub>9</sub> and R<sub>10</sub> are H, and n is 2.
17. (Withdrawn) The compound of claim 15, wherein X<sub>1</sub>A<sub>2</sub> is an enzyme having an active-site serine or cysteine.
18. (Withdrawn) The compound of claim 11, wherein X<sub>1</sub>A<sub>2</sub> is a blood coagulation factor.
19. (Withdrawn) The compound of claim 11, wherein the enzyme is selected from the group consisting of plasmins, urokinases, and tissue plasminogen activators.
20. (Withdrawn) The compound of claim 13, wherein X<sub>1</sub>A<sub>1</sub> is an amino acid, peptide, or substrate or substrate analog capable of interacting with an enzyme.
21. (Withdrawn) The compound of claim 20, wherein said amino acid is selected from the group consisting of isoleucine, phenylalanine, tyrosine, lysine, arginine, aspartate, glutamate, glutamine and asparagine.
22. (Currently amended) A compound of claim 1 selected from the group consisting of:





wherein

PEG is a polyethylene glycol having a molecular weight of from about 2,000 to about 200,000; and

mAb is a monoclonal antibody.

23. (Withdrawn) The compound of claim 22, wherein said monoclonal antibody is trastuzumab.

24. Cancelled

25. (Original) A pharmaceutically acceptable salt of the compound of claim 1.

26. (Withdrawn) A method of treatment, comprising:  
administering to a mammal in need of such treatment an effective amount of a compound of claim 1, where B is a first active moiety.

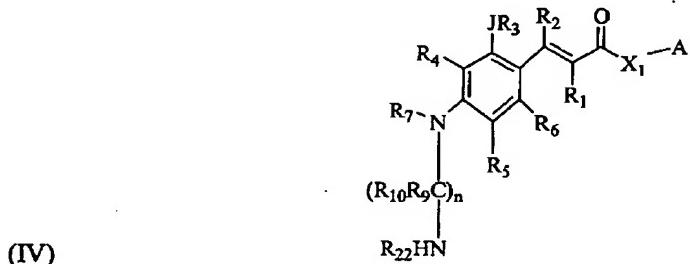
27. (Withdrawn) The method of claim 26, further comprising exposing the compound of claim 1 to an energy source after administration to said mammal.

28. (Withdrawn) The method of claim 27, wherein the energy source is white light having a wavelength in the range from 340 to 700 nm.

29. (Withdrawn) The method of claim 27, wherein the energy source is white light having a wavelength in the range from 350- 420 nm.

30. (Withdrawn) The method of claim 27, wherein the energy source is selected from the group consisting of microwave, ultrasound, radio energy, gamma radiation, radioactivity, ultraviolet light and infrared light.

31. (Currently amended) A method of preparing a conjugate, comprising:  
reacting a compound of Formula (IV)



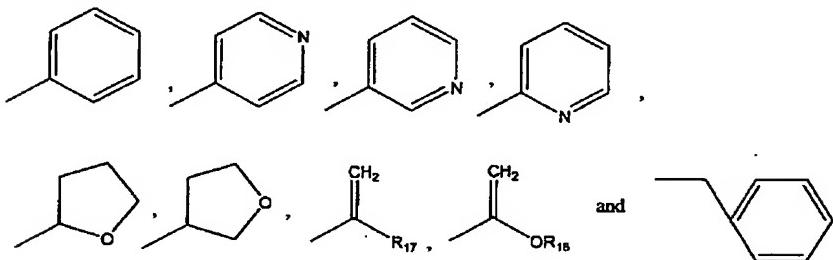
wherein:

$R_1$  and  $R_2$  are individually selected from the group consisting of H,  $CH_3$ ,  $C_2\text{-}C_{10}$  alkyls,  $C_2\text{-}C_{10}$  alkenyls or  $C_2\text{-}C_{10}$  alkynyls, each of which can be substituted or unsubstituted; straight or branched,  $C_2\text{-}C_{10}$  heteroalkyls,  $C_2\text{-}C_{10}$  heteroalkenyls or  $C_2\text{-}C_{10}$  heteroalkynyls and  $-(CR_{15}R_{16})_p\text{-}D$

wherein:  $R_{15}$  and  $R_{16}$  are individually selected from the group consisting of H,  $CH_3$ ,  $C_2\text{-}C_{10}$  alkyls,  $C_2\text{-}C_{10}$  alkenyls and  $C_2\text{-}C_{10}$  alkynyls, each of which can be substituted or unsubstituted; straight or branched; and  $C_2\text{-}C_{10}$  heteroalkyls,  $C_2\text{-}C_{10}$  heteroalkenyls or  $C_2\text{-}C_{10}$  heteroalkynyls;

$p$  is a positive integer from 1 to about 12;

$D$  is selected from among  $-SH$ ,  $-OH$ ,  $X_2$ ,  $-CN$ ,  $-OR_{19}$ ,  $NHR_{20}$ ,



wherein:

$R_{17}$  is H, a  $CH_3$  or  $X_3$ ;

$R_{18}$  is H, a  $C_{1\text{-}4}$  alkyl or benzyl;

$R_{19}$  is H, a  $C_{1\text{-}4}$  alkyl,  $X_2$  or benzyl;

$R_{20}$  is H, a  $C_{1\text{-}10}$  alkyl or  $-C(O)R_{21}$

wherein  $R_{21}$  is H, a  $C_{1\text{-}4}$  alkyl or alkoxy, t-butoxy or benzyloxy;

$X_2$  and  $X_3$  are independently selected halogens;

$R_3$  is H,  $CH_3$ , or  $-C(=O)(CR_{15}R_{16})_w\text{-}D$ ,

where  $w$  is 0 or an integer from 1 to about 12, and  $D$  is H or as described for  $R_1$  and  $R_2$ .

$J$  is O, NH or S;

$R_4$ ,  $R_5$  and  $R_6$  independently selected from the group consisting of H,  $CH_3$ ,

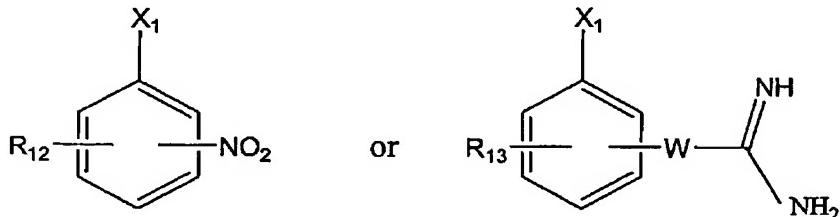
$C_2-C_{10}$  alkyls,  $C_2-C_{10}$  alkenyls or  $C_2-C_{10}$  alkynyls, each of which can be substituted or unsubstituted; straight or branched;  $C_2-C_{10}$  heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;

$R_7$  is selected from among H,  $CH_3$  and  $C_2-C_{10}$  alkyls;

$X_1$  is O, NH, or S;

$R_{22}$  is H or  $CH_3$ ; and

A is H an active moiety or  $A_1$ , wherein  $X_1A_1$  is



wherein  $R_{12}$  and  $R_{13}$  are independently H or electron donating or electron withdrawing groups and W is CH or N;

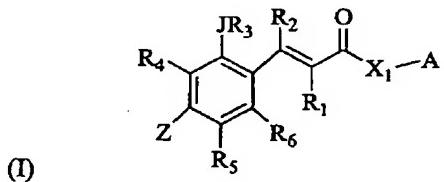
with a linking reagent containing a member of the group consisting of succinimides, maleimides, imidoesters, 2-iminothiolane, hydrazides, maleic anhydride, azides, citraconic anhydride, glutaraldehyde compound of the Formula (V):

(V) —  $L_4-B_4$

wherein  $L_4$  is a moiety containing a functional group capable of reacting with the  $NHR_{22}$  of Formula (IV);

and  $B_4$  is selected from the group consisting of polymers, biologically active materials and polymeric supports.

### 32. (New) A compound of the formula:



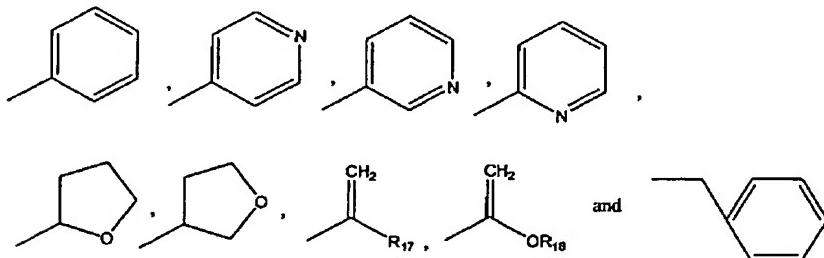
wherein:

$R_1$  and  $R_2$  are individually selected from the group consisting of H,  $CH_3$ ,  $C_2-C_{10}$  alkyls,  $C_2-C_{10}$  alkenyls or  $C_2-C_{10}$  alkynyls, straight or branched,  $C_2-C_{10}$  heteroalkyls,  $C_2-C_{10}$  heteroalkenyls or  $C_2-C_{10}$  heteroalkynyls and  $-(CR_{15}R_{16})_p-D$ ;

wherein: R<sub>15</sub> and R<sub>16</sub> are individually selected from the group consisting of H, CH<sub>3</sub>, C<sub>2</sub>-C<sub>10</sub> alkyls, C<sub>2</sub>-C<sub>10</sub> alkenyls or C<sub>2</sub>-C<sub>10</sub> alkynyls, straight or branched; and C<sub>2</sub>-C<sub>10</sub> heteroalkyls, C<sub>2</sub>-C<sub>10</sub> heteroalkenyls or C<sub>2</sub>-C<sub>10</sub> heteroalkynyls;

p is a positive integer from 1 to about 12;

D is selected from among -SH, -OH, X<sub>2</sub>, -CN, -OR<sub>19</sub>, NHR<sub>20</sub>,



wherein:

R<sub>17</sub> is H, CH<sub>3</sub> or X<sub>3</sub>;

R<sub>18</sub> is H, a C<sub>1-4</sub> alkyl or benzyl;

R<sub>19</sub> is H, a C<sub>1-4</sub> alkyl, X<sub>2</sub> or benzyl;

R<sub>20</sub> is H, a C<sub>1-10</sub> alkyl or -C(O)R<sub>21</sub>,

wherein R<sub>21</sub> is H, a C<sub>1-4</sub> alkyl or alkoxy, t-butoxy or benzyloxy;

X<sub>2</sub> and X<sub>3</sub> are independently selected halogens;

R<sub>3</sub> is H, CH<sub>3</sub>, or -C(=O)(CR<sub>15</sub>R<sub>16</sub>)<sub>w</sub>-D,

where w is 0 or an integer from 1 to about 12, and D is H or as described for R<sub>1</sub> and R<sub>2</sub>

J is O, NH or S;

R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are independently selected from the group consisting of H, CH<sub>3</sub>,

C<sub>2</sub>-C<sub>10</sub> alkyls, C<sub>2</sub>-C<sub>10</sub> alkenyls or C<sub>2</sub>-C<sub>10</sub> alkynyls, straight or branched; C<sub>2</sub>-C<sub>10</sub> heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;

Z is NR<sub>7</sub>R<sub>8</sub> or



wherein R<sub>7</sub> is selected from among H, CH<sub>3</sub>, C<sub>2</sub>-C<sub>10</sub> alkyls, alkenyls or alkynyls straight or branched; C<sub>2</sub>-C<sub>10</sub> heteroalkyls, heteroalkenyls or heteroalkynyls, or -(CR<sub>23</sub>R<sub>24</sub>)<sub>q</sub>-aryl, or R<sub>8</sub>,

wherein R<sub>23</sub> and R<sub>24</sub> are independently selected from the group consisting of H and C<sub>1</sub>-C<sub>10</sub> alkyls;

q is an integer from 1 to about 6;

R<sub>8</sub> is selected from the group consisting of (CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-NR<sub>22</sub>-R<sub>11</sub>, (CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-CH<sub>2</sub>-NHC(O)R<sub>26</sub> and (CR<sub>9</sub>R<sub>10</sub>)<sub>n</sub>-CH<sub>2</sub>-E;

wherein R<sub>9</sub> and R<sub>10</sub> are independently selected from the group consisting of H, CH<sub>3</sub>, C<sub>2</sub>-C<sub>10</sub> alkyls, C<sub>2</sub>-C<sub>10</sub> alkenyls or C<sub>2</sub>-C<sub>10</sub> alkynyls, straight or branched; C<sub>2</sub>-C<sub>10</sub> heteroalkyls, C<sub>2</sub>-C<sub>10</sub> heteroalkenyls or C<sub>2</sub>-C<sub>10</sub> heteroalkynyls and halogens;

R<sub>26</sub> is H, CH<sub>3</sub>, O-t-butyl, O-benzyl;

E is OH, SH or O-C(O)R<sub>27</sub>,

wherein R<sub>27</sub> is a C<sub>1</sub>-C<sub>6</sub> alkyl, benzyl or phenyl;

R<sub>22</sub> is H or CH<sub>3</sub>;

n is a positive integer from 1 to about 10;

R<sub>11</sub> is H or -L-B,

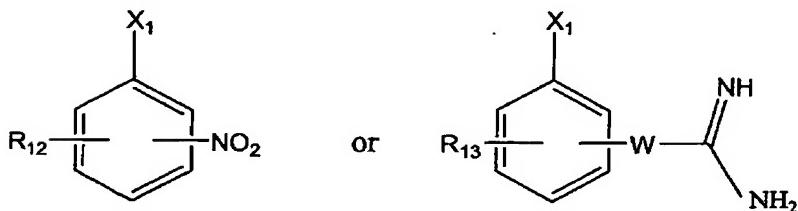
wherein L-B are maleimides, N-hydroxysuccinimidyl compounds, immidoesters, 2-iminothiolane, hydrazides and maleic anhydride;

R<sub>25</sub> is H, -C(O)-R<sub>28</sub> or -C(O)-O-R<sub>29</sub>,

wherein R<sub>28</sub> is a C<sub>1</sub>-C<sub>6</sub> alkyl or benzyl; and R<sub>29</sub> is CH<sub>3</sub>, t-butyl or benzyl;

X<sub>1</sub> is O, NH, or S; and

A is H, or A<sub>1</sub> wherein X<sub>1</sub>A<sub>1</sub> is



wherein R<sub>12</sub> and R<sub>13</sub> are independently H or electron donating or electron withdrawing groups and W is CH or N.

33. (New) The compound of claim 1, wherein said antibodies are monoclonal antibodies.

34. (New) The compound of claim 33, wherein the monoclonal antibody is trastuzumab.

35. (New) The method of claim 31, wherein the linking reagent is selected from the group consisting of heterobifunctional reagents containing N-hydroxysuccinimide and maleimide, bifunctional maleimide and bifunctional PEG's.

36. (New) The method of claim 35, wherein the heterobifunctional reagent containing N-hydroxysuccinimide and maleimide is (Succinimidyl-6-[(β-maleimidopropionamido) hexanoate].